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| EXAMINER | |
|---|---|
| MILLS, DONALD L | |

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| 2662 | |

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/588,632 | MO ET AL. | |
| | Examiner | Art Unit | |
| | Donald L Mills | 2662 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *14*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Objections*

1. Claim 35 is objected to because of the following informalities:

Regarding claim 35, "core network elements" should be corrected to "core network element". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-9, 19, 20, 27, 28, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheesman et al. (US 6,680,933 B1), hereinafter referred to as Cheesman.

Regarding claim 1, Cheesman discloses a telecommunications switch for switching protocol data, which comprises:

*Receiving connectionless and connection oriented signals from a plurality of source peripheral network elements at an ingress core network element* (Referring to Figure 4, the switch **100** supporting connection-oriented and connectionless type service, receives signals at a location between access interfaces and network interfaces for traffic management. See column 8, lines 8-10.)

*Determining a signaling type associated with each received signal, the signaling type comprising connectionless signaling or connection oriented signaling* (Referring to Figure 5, the ingress processor **112** parses each incoming protocol data unit to determine the service to which it belongs, comprising ATM and IP/MPLS. See column 8, lines 30-33.)

*Appending a transport label to each received signal based upon the determination of the signaling type, each transport label comprising an indication of the signal's signaling type* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising the destination port and service-related information. See column 8, lines 42-47.)

*Communicating the signals and appended transport labels toward destination peripheral network elements according to signaling procedures associated with each signal's signaling type* (Referring to Figure 5, egress processor **114** parses the protocol data units received from the switching fabric **103** to determine the required type of scheduling and scheduling treatment based on the signal type for output towards the protocol data units destination. See column 8, lines 62-67.)

Regarding claim 2, Cheesman discloses *wherein the signaling type further comprises a combination of connectionless and connection oriented signaling* (Referring to Figure 5, the ingress processor **112** parses each incoming protocol data unit to determine the service to which it belongs, comprising ATM and IP/MPLS signaling. See column 8, lines 30-33.)

Regarding claim 3, Cheesman discloses *wherein at least some of the plurality of signals comprise Multi-protocol label switching signals, and wherein at least some of the plurality of signals comprise Internet Protocol signals* (Referring to Figure 5, the ingress processor **112**

parses each incoming protocol data unit to determine the service to which it belongs, comprising IP/MPLS signals. See column 8, lines 30-33.)

Regarding claims 5, 20, and 28, Cheesman discloses *wherein each transport label comprises:*

*A format field operable to identify the signal's signaling type/a label value field containing information useful in processing the associated signal according to its signaling type* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising service-related information and a destination port. See column 8, lines 42-47.)

Regarding claim 6, Cheesman discloses *wherein at least one signal comprises a connectionless signal and wherein the label value field of that signal's transport label comprises a node identification operable to identify a network element through which the at least one signal will be routed* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising service-related information and a the destination port, the protocol data unit comprising IP/MPLS traffic. See column 8, lines 42-47.)

Regarding claim 7, Cheesman discloses *wherein at least one signal comprises a connection oriented signal and wherein the label value field of that signal's transport label comprises a path identifier operable to facilitate construction of a virtual circuit over which the at least one signal will traverse* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising service-related information and a destination port, the protocol data unit comprising ATM traffic for transmission over a virtual channel per the destination port. See column 8, lines 42-47.)

Regarding claim 8, Cheesman discloses *wherein at least one of the transport labels comprises a plurality of sub-transport labels, each sub-transport label providing an instruction regarding the associated signal's communication toward one of the destination peripheral network elements* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising the destination port and service-related information. See column 8, lines 42-47.)

Regarding claim 9, Cheesman discloses *wherein the plurality of sub-transport labels comprise a stack of sub-transport labels, and wherein the top sub-transport label identifies a node identification useful in determining a next hop for a connectionless signal or a path identification useful in determining a virtual circuit for a connection oriented signal* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising the destination port and service-related information, inherently comprising the node used for determining a next hop for an IP signal and a virtual circuit for an ATM signal. See column 8, lines 42-47.)

Regarding claim 19, Cheesman discloses a telecommunications switch for switching protocol data, which comprises:

*A first core network element operable to receive a signal associated with a signaling type from a source peripheral network element, the signaling type comprising connectionless signaling or connection oriented signaling* (Referring to Figure 4, ingress processor **112** parses each incoming protocol data unit, from connection and connectionless sources, to determine the service. See column 8, lines 8-10 and 30-31,) *the first core network element further operable to append to the received signal a transport label including an instruction regarding how to*

*process the signal according to the signaling type* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising the destination port and service-related information. See column 8, lines 42-47.)

*A second core network element operable to receive the signal with appended transport label, to examine transport label to determine the signaling type associated with the signal, and to process the signal according to the associated signaling type* (Referring to Figure 5, egress processor **114** parses the protocol data units received from the switching fabric **103** to determine the required type of scheduling and scheduling treatment based on the signal type for output towards the protocol data units destination. See column 8, lines 62-67.)

Regarding claim 27, Cheesman discloses a telecommunications switch for switching protocol data, which comprises:

*A processor operable to receive a network signal from the first peripheral network element and to determine a signaling type associated with the received network signal* (Referring to Figure 4, ingress processor **112** parses each incoming protocol data unit, from connection and connectionless sources, to determine the service. See column 8, lines 8-10 and 30-31,) *the processor further operable to generate a transport label including an instruction regarding how to process the signal according to its signaling type, and to append the transport label to the network signal based upon the determination of the signaling type to generate a formatted network signal* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising the destination port and service-related information, based upon the signal type. See column 8, lines 42-47.)

*A core interface operable to receive the formatted network signal and to facilitate communication of the formatted network signal to another core network element for processing according to the signaling type identified in the transport label* (Referring to Figure 5, switching fabric **103** operates on the internal encapsulation protocol to route protocol data units to their destination port via the egress processor **114**. See column 8, lines 54-56.)

Regarding claim 35, Cheesman discloses *a peripheral interface operable to receive the network signal from the first peripheral network element, and to communicate network signals received from core network elements to the second peripheral network element* (Referring to Figure 5, switch **100** comprises access interfaces **102*a***, **102*b***, and **102*c*** for reception and transmission flows to and from network interfaces **104*a*** and **104*b***. See column 7, lines 62-65.)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheesman et al. (US 6,680,933 B1), hereinafter referred to as Cheesman, in view of Raj et al. (US 6,628,649 B1), hereinafter referred to as Raj.

Regarding claim 4 as explained above in the rejection statement of claim 1, Cheesman discloses all of the claim limitations of claim 1 (parent claim.) Cheesman does not disclose *at*

*least some of the plurality of signals comprising multi-protocol label switching signals with asynchronous transfer mode, Frame Relay, or packet-over-SONET encoding.*

Raj teaches a switch control mechanism **201** is a label switch controller (LSC) that implements MPLS technology using a label distribution protocol such as LDP in conjunction with a outing protocol such as OSPF to control the flow of data packets in the form of labeled data portions, such as labeled ATM cells (See column 18, lines 4-9.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the labeled ATM cells of Raj in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to enhance the types of services supported to comprise labeled ATM cells.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheesman et al. (US 6,680,933 B1), hereinafter referred to as Cheesman.

Regarding claim 10 as explained above in the rejection statement of claim 1, Cheesman discloses all of the claim limitations of claim 1 (parent claim.) Cheesman further discloses Regarding claim 10, Cheesman discloses *wherein the sub-transport label includes an interface identifier operable to specify an interface between a network element processing the signal and the destination peripheral network element* (Referring to Figure 5, ingress processor **112** encapsulates the protocol data unit with a switching tag comprising the destination port, corresponding to the access interfaces or the network interfaces, and service-related information. See column 8, lines 42-47 and 38-39.) Cheesman does not disclose *the sub-transport label at the bottom of the stack.*

Cheesman teaches an ingress processor **112** which encapsulates the protocol data unit with a switching tag comprising the destination port, corresponding to the access interfaces or the network interfaces, and service-related information (See column 8, lines 42-47 and 38-39.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the destination port identifier of the switching tag as the last portion of information in the tag of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to more efficiently read service-related information prior to the destination address.

7. Claims 11, 12, 14-18, 21-26, 29-34, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheesman et al. (US 6,680,933 B1), hereinafter referred to as Cheesman, in view of Rekhter et al. (US 6,526,056 B1), hereinafter Rekhter.

Regarding claim 11, Cheesman discloses a telecommunications switch for switching protocol data, which comprises:

*Receiving connectionless signals and connection oriented signals at a first network element, each signal including a transport label having a format field identifying a signaling type associated with the signal, a label value field containing information useful in processing the signal according to its signaling type* (Referring to Figure 5, the egress processor **114** parses the protocol data units received from the switching fabric **103**, inherently comprising both connection-oriented and connectionless type packet data units with a switching tag comprising information of the destination port and service-related information. See column 8, lines 62-64, 32-33, and 42-47.)

*For each signal, examining the format field of the transport label to determine the signal's signaling type* (Referring to Figure 5, the egress processor **114** parses the protocol data units received from the switching fabric **103** to determine the required type of scheduling and queuing treatment based upon the type of traffic and service-related information. See column 8, lines 62-64.)

*For each signal, interpreting the information in the label value field on the transport label according to the signal type* (Referring to Figure 5, the egress processor **114** parses the protocol data units received from the switching fabric **103** to determine the required type of scheduling and queuing treatment based upon the type of traffic and destination port. See column 8, lines 62-64.)

*For each signal, communicating the signal to another network element using signaling procedures associated with the signal's signaling type* (Referring to Figure 6, the egress processor **114** transmits the protocol data unit onto the egress link **130** based upon the type of signal received. See column 9, lines 58-60.) Cheesman does not disclose *a stack of sub-transport labels, each sub-transport label providing an instruction regarding the associated signal's communication toward one of the destination peripheral network element, and wherein the top sub-transport label identifies a node identification useful in determining a next hop for a connectionless signal or a path identification useful in determining a virtual circuit for a connection oriented signal.*

Rekhter teaches that the four bytes immediately following the link-level header should be interpreted as an entry in a "tag stack." The first twenty bits should be interpreted as the tag and the twenty-fourth, bottom-of-stack-indicator bit S tells whether the packet contains any more tag-

stack entries. The first 20bit field carries the actual value of the Label which comprises information needed to forward the packet, such as the next hop and the outgoing data link encapsulation (See column 8, lines 15-20 and column 36, lines 40-46.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag stack of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claim 12, the primary reference further teaches *wherein the signaling type further comprises a combination of connectionless and connection oriented signaling* (Referring to Figure 5, the ingress processor **112** parses each incoming protocol data unit to determine the service to which it belongs, comprising ATM and IP/MPLS signaling. See column 8, lines 30-33.)

Regarding claims 14, 22, and 30 as explained above in the rejection statement of claims 11, 19, and 27; Cheesman and Rekhter disclose all of the claim limitations of claims 11, 19, and 27 (parent claims.) Cheesman does not disclose *wherein the sub-transport label at the bottom of the stack of sub-transport labels includes an interface identifier operable to specify an interface between a network element processing the signal and the destination peripheral network element.*

Rekhter teaches that the four bytes immediately following the link-level header should be interpreted as an entry in a "tag stack." The first twenty bits should be interpreted as the tag and the twenty-fourth, bottom-of-stack-indicator bit S tells whether the packet contains any more tag-stack entries. The first 20bit field carries the actual value of the Label which comprises

information needed to forward the packet, such as the next hop and the outgoing data link encapsulation (See column 8, lines 15-20 and column 36, lines 40-46.) Cheesman teaches a switching fabric **103**, which appends a switching tag comprising information of the destination port and service-related information (See column 8, lines 62-64, 32-33, and 42-47.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the destination port of Cheesman in the bottom of the tag stack of Rekhter. One of ordinary skill in the art would have been motivated to do so in order to minimize data processing and centralize tagging operation.

Regarding claims 15, 23, and 31 as explained above in the rejection statement of claims 11, 19, and 27; Cheesman and Rekhter disclose all of the claim limitations of claims 11, 19, and 27 (parent claims.) Cheesman does not disclose *examining the top sub-transport label to determine that the signal comprises a connectionless signal and comparing the value in the label value field of the top sub-transport label to a node identification associated with the first network element.*

Rekhter teaches that the four bytes immediately following the link-level header should be interpreted as an entry in a "tag stack." The first twenty bits should be interpreted as the tag and the twenty-fourth, bottom-of-stack-indicator bit S tells whether the packet contains any more tag-stack entries. The first 20bit field carries the actual value of the Label which comprises information needed to forward the packet, such as the next hop and the outgoing data link encapsulation (See column 8, lines 15-20 and column 36, lines 40-46.) Rekhter further teaches the value of the label field is inferable from the value of the label, which in this case corresponds to a connectionless oriented signal (See column 37, line 28.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag stack of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claims 16, 24, and 32 as explained above in the rejection statement of claims 11, 19, and 27; Cheesman and Rekhter disclose all of the claim limitations of claims 11, 19, and 27 (parent claims.) Cheesman does not disclose *determining that the node identification associated with the first network element does not match the value in the label value field of the transport label and routing the signal toward the network element associated with the node identification in the label value field of the top sub-transport label.*

Rekhter teaches that the four bytes immediately following the link-level header should be interpreted as an entry in a "tag stack." The first twenty bits should be interpreted as the tag and the twenty-fourth, bottom-of-stack-indicator bit S tells whether the packet contains any more tag-stack entries. The first 20bit field carries the actual value of the Label which comprises information needed to forward the packet, such as the next hop which is determined to correspond to or not correspond to the next hop when forwarded (See column 8, lines 15-20 and column 36, lines 40-46.) Rekhter further teaches that **P2** knows to forward that packet to the neighbor, **P1**, based upon the tag **T2** (See column 34, lines 32-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag stack of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claims 17, 25, and 33 as explained above in the rejection statement of claims 11, 19, and 27; Cheesman and Rekhter disclose all of the claim limitations of claims 11, 19, and 27 (parent claims.) Cheesman does not disclose *determining that the node identification associated with the first network element matches the value in the label value field of the top sub-transport label; removing the top sub-transport label from the stack of sub-transport labels; and examining the next sub-transport label to determine further processing instructions.*

Rekhter teaches that the four bytes immediately following the link-level header should be interpreted as an entry in a "tag stack." The first twenty bits should be interpreted as the tag and the twenty-fourth, bottom-of-stack-indicator bit S tells whether the packet contains any more tag-stack entries. The first 20bit field carries the actual value of the Label which comprises information needed to forward the packet, such as the next hop which is determined to correspond to or not correspond to the next hop when forwarded (See column 8, lines 15-20 and column 36, lines 40-46.) When a labeled packet is received the label value is also read to determine if the top label stack should be replaced and then to push one or more additional entries on the label stack which is then read (See column 36, lines 51-56.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag stack of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claims 18, 26, and 34 as explained above in the rejection statement of claims 11, 19, and 27; Cheesman and Rekhter disclose all of the claim limitations of claims 11, 19, and 27 (parent claims.) Cheesman does not disclose *examining the top sub-transport label to*

*determine that the signal comprises a connection oriented signal and that the label-value field in the top sub-transport label comprises a path identifier; and using the value in the label value field of the top sub-transport label to at least being establishing a virtual circuit between the first network element and another network element.*

Rekhter teaches P1 will bind a VPI/VCI tag to the address of PE1 and distribute the bindings, based upon the received ATM signal (See column 22, lines 38-39.) When the packet is received the destination address of that packet is determined and the next hop of an ATM switch based upon the tag value of the VPI/VCI value (See column 22, lines 50-51.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag stack of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claims 21 and 29 as explained above in the rejection statement of claims 19 and 27; Cheesman and Rekhter disclose all of the claim limitations of claims 19 and 27 (parent claims.) Cheesman does not disclose *a stack of sub-transport labels, each sub-transport label providing an instruction regarding the associated signal's communication toward one of the destination peripheral network element, and wherein the top sub-transport label identifies a node identification useful in determining a next hop for a connectionless signal or a path identification useful in determining a virtual circuit for a connection oriented signal.*

Rekhter teaches that the four bytes immediately following the link-level header should be interpreted as an entry in a "tag stack." The first twenty bits should be interpreted as the tag and the twenty-fourth, bottom-of-stack-indicator bit S tells whether the packet contains any more tag-

stack entries. The first 20bit field carries the actual value of the Label which comprises information needed to forward the packet, such as the next hop and the outgoing data link encapsulation (See column 8, lines 15-20 and column 36, lines 40-46.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag stack of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claim 36 as explained above in the rejection statement of claim 1, Cheesman discloses all of the claim limitations of claim 1 (parent claims.) Cheesman further discloses *receiving the signals and transport labels at an egress core network element* (Referring to Figure 5, egress processor **114** parses the protocol data units received from the switching fabric **103** to determine the required type of scheduling and scheduling treatment based on the switching tag. See column 8, lines 62-67.) Cheesman does not disclose *removing the appended transport labels form each signal and communicating each signal to a destination peripheral network element.*

Rekhter teaches PE1 forwards the packet CE1 after removing tag T3 (See column 8, lines 51-52.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag removal of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

Regarding claim 37 as explained above in the rejection statement of claim 19, Cheesman discloses all of the claim limitations of claim 1 (parent claim.) Cheesman does not disclose *wherein the second core network element comprises an egress core network element operable to remove the appended transport label and communicate the signal to a destination peripheral network element.*

Rekhter teaches PE1 forwards the packet CE1 after removing tag T3 (See column 8, lines 51-52.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement tag removal of Rekhter in the system of Cheesman. One of ordinary skill in the art would have been motivated to do so in order to reduce the data-storage requirements of the network devices for MPLS traffic as taught by Rekhter (See column 5, lines 7-8.)

### *Response to Arguments*

8. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new grounds of rejection.

### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 703-305-7869. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald L Mills
DLM
March 11, 2004

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600